





**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

MEIRICK ET AL.

Atty. Ref.: 4147-144; Confirmation No. 9780

Appl. No. 10/571,606

TC/A.U. 2617

Filed: March 10, 2006

Examiner: Patel, Mahendra R.

For: METHOD FOR DISCARDING ALL SEGMENTS CORRESPONDING TO THE SAME  
PACKET IN A BUFFER

\* \* \* \* \*

April 18, 2011

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SECOND PRE-APPEAL BRIEF REQUEST FOR REVIEW**

**Clear Error #1: Yoshida, Muller, and Jason all fail to disclose that the “base station system compare[s] a size of a data packet segment with a size of a next consecutive data packet segment in said buffer.”**

Yoshida fails to disclose segmenting data packets into data packet segments. Yoshida discloses only complete, non-segmented data packets in the form of GRE encapsulated packets. See Fig. 3, [0056]. In fact, when reviewing the propriety of the final rejection, the pre-appeal panel should understand that the primary Yoshida reference fails to teach any feature in the body of any independent claim.

For the missing claim feature quoted above, the FOA relies on Muller. The FOA contends that Muller, in addition to comparing the sizes of data packet segments with the MTU threshold, also teaches that the size of a data packet segment is compared to the size of a next consecutive data packet segment in a buffer, citing 41:65-67 and 42:1-2 of Muller. This contention is unreasonable.

The cited passages of Muller compare the size of each data packet segment of a datagram to the MTU threshold in order to find the last data packet segment of the datagram. In contrast to the contention in the FOA, there is no teaching of comparing the size of a data packet segment to the size of a next consecutive data packet segment. As pointed out in the first successful pre-appeal, comparing a segment size to a fixed threshold value is not the same as comparing the size of the first data packet segment with the size of the next data packet segment as claimed.

Notwithstanding the Examiner's attempt to deflect the analysis away from what is actually claimed, the plain fact is that Muller's MTU threshold is not a packet. There is no teaching Muller of determining the size of a next packet so that it can be compared to the size of the current packet. The size of the current packet and that of the next packet is unknown and can vary. The size of the MTU threshold is known and does not vary.

The FOA further contends that Muller's MTU is a buffer. But Muller defines MTU at 2:14 -17 as a Maximum Transfer Unit which defines the maximum amount of data a packet can carry. MTU is a threshold value and not a buffer.

The Examiner also suggests that Muller teaches packet segmenting at 35:47-55. But this passage describes implementing a flow database all in one site, i.e., monolithic, or distributed at multiple sites, i.e., segmented. There is no teaching here of segmenting a complete data packet into multiple data packet segments.

**Clear Error #2: Yoshida, Muller, and Jason all fail to teach "said base station system discarding said identified complete data packet from said buffer."**

The FOA states that Jason "teaches both fragmented [0004] and completed package [sic] discarding [0005]." Paragraph 0004 explains that if not all fragments of a packet are received at the receiving point before a reassembly timer expires, the received fragments are discarded. The

received fragments constitute only a part of the packet and not the entire packet. Paragraph 0005 states that if the sender is made aware of the MTU threshold, it can send packets that are small enough, i.e., smaller than the MTU threshold, so that they do not need to be fragmented. In that case, there is no need to cache and reassemble them at the receiver. But there is no disclosure in paragraph 0005 of discarding packets or fragments. Overall, Jason only discards non-complete packets, i.e., a subset of the fragments of a packet, in response to the expiry of a reassembly timer. Jason fails to teach discarding complete packets from a buffer.

**Clear Error #3: the proposed combination of Yoshida, Muller, and Jason is unreasonable and improper.**

The FOA presents not evidence to support the contention that a person of ordinary skill in the mobile radio communications art would have combined the wired, computer network teachings of Muller and/or Jason with the CDMA-based radio communications system in Yoshida. The communication between devices in Yoshida is based on wireless radio-based communication protocols, while the communications between the interconnected computers is in Muller and Jason based on different wired communication protocols. The Examiner's only basis for contending otherwise is "because of the old to new technology changes market forces." Which technology is old and which is new? What market forces have forced the use of wireline protocols in wireless systems when there are many suitable existing wireless protocols already available?

The obviousness rejection ignores the technical problems that the claimed technology solves. Although using a fixed MTU threshold in Muller and in Jason might be acceptable in computer networks with wired communication protocols, such an approach would not be advantageous for situations encountered in radio-based mobile communications systems. For

example, in contrast to Muller and Jason, in any specific transfer of data packet segments, there is a maximum size. This maximum size is typically negotiated between the user equipment and the communication network and can differ from one user equipment to another and also differ during different communication sessions. So it generally is not appropriate to use a single MTU threshold, as in Muller and Jason, in mobile communications systems. The claimed technology, on the other hand, enables identification of a complete data packet where it is not possible to use a fixed, single segment threshold. None of the three applied documents or any combination thereof recognizes or solves that problem.

Moreover, there is no need to combine Muller and Jason. Muller already provides a detailed description of how to handle an overflow situation by discarding packets. Muller discloses that randomly dropping packets distributes the impact of dropped packets among multiple connections or flows. If a small number of transmitting entities send a majority of the traffic received at the network interface circuit, then dropping packets randomly ensures that these offending entities are penalized proportionately. See 106:20-26.

Jason, on the other hand, teaches that fragments of a received datagram are discarded when the reassembly timer for the datagram expires. But this is inefficient in the case of overflow because of the delay time waiting for the expiry of the timer before discarding any packets. At that point in time, further packets may have been received at the buffer, actually worsening the overflow situation. The person skilled in the art would consequently not combine the fragment discarding technique of Jason with the disclosure of Muller because i) of the above-described inefficiency in Jason's technique for overflow situations and ii) Muller already discloses a way of discarding packets in the case of buffer overflow.

The clear errors noted above for claim 1 also apply to claims 5, 10, and 20. The final rejection should be withdrawn and the case allowed.

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Respectfully submitted,  
**NIXON & VANDERHYE P.C.**

By:

A handwritten signature in black ink, appearing to read "John R. Lastova", is written over a horizontal line.

John R. Lastova  
Reg. No. 33,149

901 North Glebe Road, 11th Floor  
Arlington, VA 22203-1808  
Telephone: (703) 816-4000